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EXAMINER	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/643,422	TANAKA ET AL.	
	Examiner	Art Unit	
	kim-kwok CHU	2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *RCE filed on 11/16/2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16,20-22,26-36 and 40-43* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *1-4,13-16,43 and 44* is/are allowed.

6)☒ Claim(s) *5-12,20-22,26-36 and 40-42* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *19 August 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Response to Remarks

1. Applicant's Amendment and Remarks filed on November 16, 2007 have been fully considered. With respect to the amended Claim 5, the amended limitation "external to the amplifier apparatus" does not overcome the prior art rejection. For example, the prior art (U.S. Patent 7,065,287) of Heredia's digital data processor 58 in Fig. 1 is connected to an external amplifier apparatus 136, 138, 158, 160 and 168 as illustrated in Fig. 2B. In other words, the line-out jacks 136, 138, 158, 160 and 168 are connected to external amplifier apparatuses such as VCR, Tape and speakers.

Applicant disagrees that the prior art of Heredia et al. discloses the amended feature "external amplifier apparatus which is currently connected to said sound recording reproducing apparatus" (page 21 of the Remarks, 4th paragraph, lines 4-7). Accordingly, it is well known that a signal processing unit in a recording/reproducing apparatus such as a media center is used to connect to external amplifier apparatus such as TV, VCR and speakers.

Similarly, independent Claims 9, 20, 26, 29, 33 and 40 having similar amended limitation do not overcome the prior art of Heredia's rejection as explained above.

Continued Examination after Final Rejection

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on November 16, 2007 has been entered.

Claim Objections

3. Claim 26 is objected to because of the following informality:

(a) in Claim 26, lines 3 and 6, there are two "a recorded level detection section". Applicant should clarify whether or not they are the same detection section.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

> *A person shall be entitled to a patent unless -*
> *(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.*

5. Claims 5-12, 20-22, 26-36 and 40-42 are rejected under 35 U.S.C. § 102(e) as being anticipated by Heredia et al. (U.S. Patent 7,065,287).

6. Heredia teaches a sound recording/reproducing method in a sound recording/reproducing apparatus for recording sound data onto a recording medium and reproducing the sound data from the record recording medium having all the steps as recited in claims 5-12 and 29-36. For example, Heredia teaches the following:

(a) With respect to Claim 5, an attribute information (database) recording step of recording, onto a recording medium 30, attribute information (database) on sound data of a music piece that are to be recorded onto the recording medium 30 (Figs. 1, 3A and 4; column 6, lines 17-20); a rule table creation step of creating a rule table (audio formats) that associates the attribute information (database), digital signal

processor/DSP program parameters (audio controls such as coding and decoding process) each designating, to a digital signal processor 58 of an external amplifier apparatus (Fig. 2B; jacks 136, 138, 158, 160 and 168 are connected to external amplifier apparatus such as VCR, Tape, speakers), a sound field process or frequency characteristic process to be performed (Figs. 1 and 3A; column 6, lines 35-48; various audio formats such as MP3, MPEG-2 respective to each audio file is a rule table which controls the DSP parameters) and processing start times (audio file sequence) each designating a time (playback order) when the sound field process or frequency characteristic process (signal processing) is to be started; a DSP program parameter (decoding) acquisition step of, at a time of reproduction when sound data of a music piece to be reproduced, read out from the recording medium 30, are to be outputted to the external amplifier apparatus (such as speakers) which is currently connected to the sound recording/reproducing apparatus, acquiring, from the recording medium 30, the attribute information on the sound data of the music piece to be reproduced and acquiring, from the rule table, any of the DSP program parameters that corresponds to the attribute information (Figs. 1 and 3A; audio is reproduced based on its title and format from the database); and a DSP program parameter setting step of setting the DSP program parameter

(decoding the audio formats such as MP3, AM, FM, SPDIF and MPEG-2 etc.), acquired from the rule table, in the digital signal processor of the external amplifier apparatus (such as the speakers) currently connected to the sound recording/reproducing apparatus (Fig. 1).

(b) With respect to Claim 6, when a change (different audio formats) has been made to the sound field process or frequency characteristic process of the external amplifier apparatus (such as the speakers) during reproduction of the sound data of the music piece, there is performed a learning (reconfiguring) of registering (updating database) in the rule table, a DSP program parameter (audio format) indicative of the changed sound field process or frequency characteristic process in association with the attribute information of the sound data being currently reproduced (Figs. 1, 3A and 6H; audio file format can be displayed in the CD Guide as illustrated in Fig. 6H).

(c) With respect to Claim 7, the attribute information (database) on the sound data of the music piece includes music piece information identifying the music piece, album information identifying an album to which the music piece belongs, artist information identifying an artist of the music piece, and genre information identifying a musical genre of the music piece (Figs. 3A and 3B).

(d) With respect to Claim 8, the attribute information (database) on the sound data of the music piece includes compression scheme (MP3, MPEG-2) information indicative of a compression scheme with which the sound data are recorded on the recording medium (Figs. 3A and 3B).

7. Apparatus claims 9-12 are drawn to the apparatus corresponding to the method of using same as claimed in claims 5-8. Therefore apparatus claims 9-12 correspond to method claims 5-8, and are rejected for the same reasons of anticipation as used above. Claim 9 however also recites the following limitations which are taught by the prior art of Heredia:

(a) with respect to Claim 9, the external amplifier (such as the speakers) acquires the attribute information of sound data of a music piece to be reproduced and corresponds to a process start time which coincides with an elapsed reproducing time of the sound data (Fig. 1; DSP starts signal processing when sound data is being reproduced as a sound decoding operation).

8. Apparatus claims 29-32 are drawn to the apparatus corresponding to the method of using same as claimed in claims 5-8. Therefore apparatus claims 29-32 correspond to method claims 5-8, and are rejected for the same reasons of anticipation as used above. Claim 29 however also recites the following limitations which are taught by the prior art of Heredia:

(a) with respect to Claim 29, the external amplifier (such as the speakers) acquires the attribute information of sound data of a music piece to be reproduced and corresponds to a process start time which coincides with an elapsed reproducing time of the sound data (Fig. 1; DSP starts signal processing when sound data is being reproduced as a sound decoding operation).

9. Apparatus claims 33-36 are drawn to the apparatus corresponding to the method of using same as claimed in claims 5-9. Therefore apparatus claims 29-32 correspond to method claims 5-9, and are rejected for the same reasons of anticipation as used above. Claim 33 however also recites the following limitations which are taught by the prior art of Heredia:

(a) With respect to Claim 33, a recording medium 30 on which sound data can be recorded and reproduced (Fig. 1); and

the DSP parameters correspond to any one of the processing start times that has coincided with an elapsed (file length) reproducing time of the sound data (Figs. 3A and 3B; playlist and file length are associated to each audio format stored in the database).

10. Heredia teaches a sound recording/reproducing method in a sound recording/reproducing apparatus for recording sound data onto a recording medium and reproducing the sound data from the recording medium having all the steps as recited in claims 20-22. For example, Heredia teaches the following:

(a) With respect to Claim 20, a recorded level (audio parameters) recording step of, when a succession (playlist) of sound data (audio files) are to be recorded onto the recording medium 30, detecting a recorded level (audio parameters) of the succession of the sound data and recording, onto the recording medium 30, the detected recorded level in association with the succession of the sound data (Figs. 3A and 3B); a volume control step of, when sound data read out from the recording medium 30 are to be output to an external amplifier apparatus (Fig. 2B; jacks 136, 138, 158, 160 and 168 are connected to external amplifier apparatus such as VCR, Tape, speakers), which is currently connected to the sound recording/reproducing apparatus having a volume control 150, 152, 164 being

controlled from outside (Fig. 2B), acquiring a recorded level (audio parameters) corresponding to a succession of the sound data to be reproduced and controlling the volume control of the external amplifier apparatus (such as the speakers) currently connected to the sound recording/reproducing apparatus on the basis of the acquired recorded level and a reference recorded level (Fig. 1; audio is processed based on its audio parameters).

(b) With respect to Claim 21, a predetermined value (audio parameters such as amplification gain) is set as the reference recorded level.

(c) With respect to Claim 22, the reference recorded level (gain) is determined on the basis of a plurality of recorded levels corresponding to a plurality of successions of sound data to be reproduced (Fig. 1; reference gain is the predetermined gain used in the audio subsystem 22).

11. Heredia teaches a sound recording/reproducing method having all the steps as recited in claims 26-28 and 40-42. For example, Heredia teaches the following:

(a) With respect to Claim 26, a recording medium 30 on which sound data can be recorded and reproduced (Fig. 1; column 5, lines 65-67); a recorded level (format) detection section that, when a succession (selected files) of sound data are to be recorded onto the recording medium 30, detects a recorded level of the succession of the sound data (Fig. 1; multimedia files in form of a database are stored in the medium 30); the recorded level detection section that records the recorded level, detected by the recorded level detection section, onto the recording medium 30 in association with the succession of the sound data (Fig. 1; selected audio files and its format are stored); and a recorded level acquisition section (audio processing) that, at a time of reproduction when sound data read out from the recording medium 30 are to be outputted to an external amplifier apparatus (Fig. 2B;; jacks 136, 138, 158, 160 and 168 are connected to external amplifier apparatus such as VCR, Tape, speakers) which is currently connected to the sound recording/reproducing apparatus having a volume control 150, 152, 164 (Fig. 2b) being controlled from outside, acquires a recorded level (format) corresponding to a succession of the sound data to be reproduced (Fig. 1; audio files with various

formats are being processing/decoding); an output level control section 150, 152, 164 that controls the volume control of the external amplifier apparatus (such as the speakers) currently connected to the sound recording/reproducing apparatus on the basis of the acquired recorded level and a reference recorded level (Figs. 1 and 2b).

(b) With respect to Claim 27, a predetermined value (audio parameters such as amplification gain) is set as the reference recorded level.

(c) With respect to Claim 28, the reference recorded level (gain) is determined on the basis of a plurality of recorded levels corresponding to a plurality of successions of sound data to be reproduced (Fig. 1; reference gain is the predetermined gain used in the audio subsystem 22).

12. Claims 40-42 have limitations similar to those treated in the above rejection, and are met by the reference as discussed above as cited in Claims 26-28. Claim 40 however also recites the following limitations which are taught by the prior art of Heredia:

(a) With respect to Claim 40, a volume control section 150, 152, 164 that controls the volume control of the external amplifier apparatus (such as the speakers) on the basis of acquired recorded level and a reference recorded level (Fig. 2B).

Allowable Subject Matter

13. Claims 1-4, 13-16, 42 and 44 are allowable over prior art.

14. The following is an Examiner's statement of reasons for the indication of allowable subject matter:

As in claim 1, the prior art of record fails to teach or fairly suggest a sound recording/reproducing method in a sound recording/reproducing apparatus for recording sound data onto a recording medium and reproducing the sound data from the recording medium having the following features:

(a) a DSP program parameter acquisition step of, at a time of reproduction when sound data of a music piece to be reproduced, read out from the recording medium, are to be outputted to the amplifier apparatus that is currently connected to the sound recording/reproducing apparatus, acquiring, from the recording medium, the attribute information on the sound data of the music piece to be reproduced and acquiring, from the rule table, any of the DSP program parameters that corresponds to the attribute information;

(b) a step of using, when a model of an amplifier apparatus that is the object of control during creation of the rule table and a model of the amplifier apparatus that is currently connected to the sound recording/reproducing apparatus coincide with each other, the DSP program parameter

acquired from the rule table as a DSP program parameter after completion of the acquisition process;

(c) a step of using, when the model of an amplifier apparatus that is the object of control during creation of the rule table differs from the model of the amplifier apparatus that is currently connected to the sound recording/reproducing apparatus, a DSP program parameter acquired from the rule table and a DSP program parameter corresponding to the amplifier apparatus that is currently connected to the sound recording/reproducing apparatus from a DSP program associating table that associates DSP program parameters of a plurality of amplifier apparatuses, and using the DSP program parameter acquired from the DSP program associating table as a DSP program parameter after completion of the acquisition process; and

(d) a DSP program parameter setting step of setting the DSP program parameter after completion of the acquisition step, in the digital signal processor of the amplifier apparatus that is currently connected to the sound recording/reproducing apparatus.

As in claims 13, 43 and 44, the prior art of record fails to teach or fairly suggest a sound recording/reproducing method in a sound recording/reproducing apparatus for recording sound data onto a

recording medium and reproducing the sound data from the recording medium having the following features:

(a) a DSP program parameter acquisition section that, at a time of reproduction when sound data of a music piece to be reproduced, read out from the recording medium, are to be outputted to the amplifier apparatus which is currently connected to the sound recording/reproducing apparatus, acquires, from the recording medium attribute information of sound data to be reproduced and acquires, from the rule table, any of the DSP program parameters that corresponds to the attribute information on the sound data

(b) a section that uses, when a model of an amplifier apparatus, that is the object of control during creation of the rule table and a model of the amplifier apparatus that is currently connected to the sound recording/reproducing apparatus coincide with each other, the DSP program parameter acquired from the rule table as a DSP program parameter after completion of the acquisition process;

(c) a DSP program associating table associating DSP program parameters of a plurality of amplifier apparatus;
a section that acquires, when the model of an amplifier apparatus that is the object of control during creation of the rule table differs from the model of the amplifier apparatus that is currently connected to the sound recording/reproducing

apparatus, a DSP program parameter corresponding to the amplifier apparatus that is currently connected to the sound recording/reproducing apparatus from the DSP program associating table, and uses the DSP program associating table as a DSP program parameter after completion of the acquisition process; and

(d) a DSP program parameter setting section that sets the DSP program parameter after completion of the acquisition process, acquired from the rule table, in the digital signal processor of the amplifier apparatus currently connected to the sound recording/reproducing apparatus.

The features indicated above, in combination with the other elements of the claims, are not anticipated by, nor made obvious over, the prior art of record.

15. Any inquiry concerning this communication or earlier communication from the examiner should be directed to Kim CHU whose telephone number is (571) 272-7585 between 9:30 am to 6:00 pm, Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa Nguyen, can be reached on (571) 272-7579.

The fax number for the organization where this application or proceeding is assigned is (571) 273-8300

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished application is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9191 (toll free).

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